Isuzu IMDS

(International Material Data System)

Operation Manual

Version 6.1
2012/5/11

ISUZU MOTORS LIMITED

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0. Isuzu IMDS Operation Manual

Purpose: In order to understand the environmental impact of products and their recycling rates, Isuzu collects material and chemical substance information through IMDS. Isuzu will request suppliers to send data for IMDS to Isuzu. This manual explains how to create and send correct data.

The rules and guidelines in the IMDS Recommendation form the basis for data entry to IMDS. As regards entries that are different from the IMDS Recommendation, however, you are kindly requested to follow the Isuzu IMDS Operation Manual.

Note: RRR certification (vehicle certification) in EU recycling regulations sometimes requires the comparison between the IMDS data (weight and material) and the actually measured data as well as specifications in order to validate IMDS data which form the basis for the calculation of the recycling rate. The certification may also require to validate sub-components. This manual is also intended to accommodate this requirement.

Differences (changes in entry) from the previous version (Ver. 6.0)

Paragraph 7.8 (Cautions in Selecting and Inputting Material in IMDS) is added to Section 7 (Key Points of the Creation of IMDS Data Sheets) on page 18.

1. Outline of Process Flow from Request to Completion of Acceptance

Fig. 1 shows the process flow from Isuzu requesting the creation and sending of an IMDS data sheet to completing its approval. Isuzu will request to create and send a data sheet using one of the following methods in Table-1

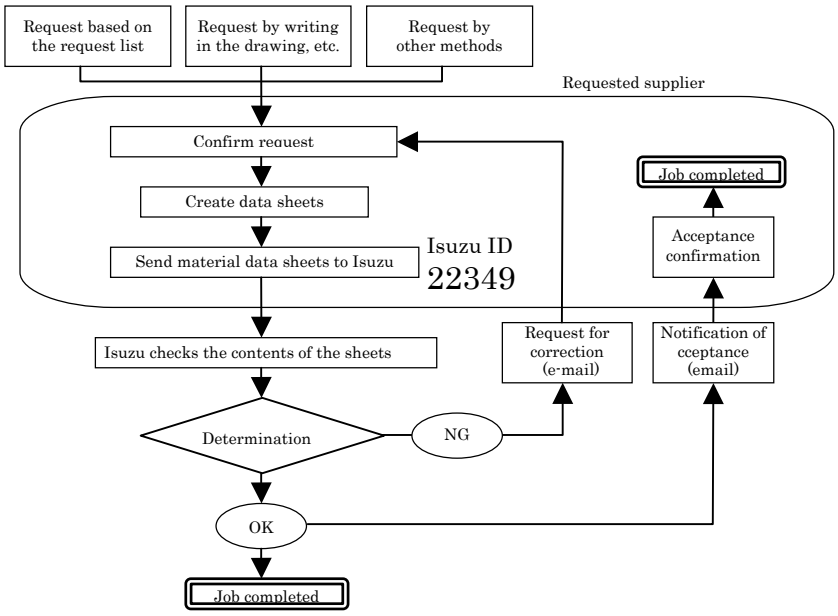
Table-1 Methods of Requesting a Data Sheet

Methods of sending a data sheet	Request by e-mail (parts list to be attached)
	Request by instructions according to ISC-A00-008Y described in the drawing
	Request by other methods

Isuzu will check a data sheet received from a supplier and determine whether it should be "accepted(acpt)" or "rejected(recd)" The supplier will receive a notification by e-mail regarding the determined result.

For any material data sheets that were rejected, Isuzu will clearly state what should be corrected and how to correct it in the notification. Please refer to the notification for necessary corrections.

Fig.-1 Process Flow from Request to Completion of Acceptance



*Note: "Accepted" in the IMDS data sheet merely means that a material data sheet received by Isuzu meets the entry requirements. It does not mean, however, that Isuzu has accepted the engineering specifications of parts and components and materials used.

2. Basic Points Common to the Creation and Sending of a Data Sheet

2.1 Part Number, Description, Supplier Code, Data Sheet Type, and Data Acceptance Completion Time Limit

When a material data sheet is requested from Isuzu, suppliers should create it by using such items as part number, description, supplier code, and data sheet type as specified and send it to Isuzu. Please allow for ample lead time for specified acceptance completion. In case these items are not specified, suppliers should create and send a material data sheet according to Tables 2 and 3.

* When it is predicted that a material data sheet cannot be sent before the time limit for a specified acceptance completion, please inform us of the reason of the delay and present a proposed acceptance completion time limit. Isuzu will study if it can be adjusted.

* If you plan to introduce new parts or change specifications, you may obtain data (materials, chemical substances, etc.) for a material data sheet's creation at early stages (study phase or prototype phase) to shorten the lead time for the creation of a data sheet. Your cooperation is much appreciated in this regard.

Table-2 Part Number, Description, Supplier Code, Data Sheet Type and Data Acceptance Completion Limit Time

Item	When Isuzu specifies by using a request list	How to handle each item if not specified by Isuzu
Part number	Enter, select, or respond as specified	Use Isuzu's part number. (Drawing number is unacceptable)
Description		Use Isuzu's description written in the drawing. Be sure to enter RH, LH, FT or RR for relevant part installation position, if so indicated.
Supplier code		Use the supplier code of the supplier determined by Isuzu when you deliver relevant parts or materials to Isuzu.
Data sheet type		Select a data sheet type from Table-3.
Data acceptance completion time limit	* Note	For a drawing with a statement, "The restricted or reportable substances for parts shall be as specified in ISC-A00-008Y", the acceptance completion time limit is prior to the delivery of initial production parts

Note : Subject to change depending upon adjustments between the supplier and Isuzu

Table-3 Selection of Data Sheet Type

Type of delivery to Isuzu	Data sheet type
Complete assembly, Component	Component Data
Casting/forging blanks, semi-finished product	Semi-component Data
Material, quasi-direct material	Material Data

2.2 IMDS Recommendation

A data sheet to be sent to Isuzu should be, in principle, created according to the latest IMDS recommendation, unless otherwise specifically requested by Isuzu. The IMDS Recommendation can be obtained from "Recommendation" in the main menu on the IMDS main screen that appears immediately after the logon.

2.3 Module ID

2.3.1 How to use a module ID

A module ID must be used only for one part number. If its suffix is changed due to a design change, etc., please change the current module ID to a new one. Do not use the module ID used before the change. Data sheets are controlled by module IDs at Isuzu. If the same module ID is applied to a data sheet with different part numbers, it will block a proper control of data sheets. This rule should be strictly observed. (It is fundamental to allocate one part number to one module ID)

2.3.2 Module ID for data correction

When you correct a data sheet, please update the data sheet without changing the module ID. (Please use the function of "New Version")

2.4 Data Sheets of Parts and Materials Supplied by Isuzu

2.4.1 Creation of a data sheet using the data sheets of parts and materials supplied by Isuzu

When data sheets of parts or materials supplied by Isuzu are necessary for creating a data sheet, please check if you have already received them from Isuzu. If you have already received the data sheets and find them old, please check if there are any omissions of necessary information. When necessary, contact Isuzu with the Excel file you have already received from Isuzu. We will have them accepted and send them to you. Please use them to create a data sheet.

2.4.2 Materials supplied by Isuzu

If the materials supplied by Isuzu correspond to public standards and correspond to the materials in the data sheets made public by the IMDS-Committee/ILI Metals or Stahl und Eisen Liste, please use these data sheets.

2.5 IMDS Data Sheets for Public Standard Materials

When public standard materials correspond to those in the data sheets made public by the IMDS-Committee/ILI Metals, or Stahl und Eisen Liste, please use these data sheets.

2.6 Creation and Sending of Material Data Sheets with Similar Component Structure

First, create and send one or two representative material data sheet for acceptance completion at Isuzu. Then create and send the remaining material data sheets by referring to the accepted data sheet. Please do not send many data sheets at one time as you may receive the same corrections on different data sheets.

2.7 Contact Person

Before you send a data sheet to Isuzu, you must select a "Contact Person" for the supplier information. This information is for Isuzu to contact you to ask about the contents of a data sheet. A client manager of each supplier is requested to periodically check if the contact person is correct.

3. Creation of a Data Sheet

3.1 Creation of a Material Data Sheet

Please enter necessary items to the composition information in a material data sheet according to Table 4.

3.2 Addition of Chemical Substances to a Material Data Sheet

When you add chemical substances to a material data sheet, please enter the composition information of the chemical substances according to Table 5.

3.3 Creation of a Semi-component Data Sheet

Please enter necessary items to the composition information in a semi-component data sheet according to Table-6.

Table-4 Entry Items to Composition Information in Material Data Sheets

Symbol for necessity of entry ○:Essential △:Essential on condition Blank: Optional

Field Name	Necessity of Entry	Entry Condition	Remarks for Entry
Description	○	When sending material data sheets	A symbol specified in public standards or a name defining a material
Trade name	△		Enter a trade name as specified by Isuzu.
Internal Mat.-No			
Std. Mat.-No.			
Symbol	△	For resin and rubber materials	A symbol specified in ISO, or in public standards
Classification	○		
Public Standards	△	When applicable to public standards	
OEM Standards			
Supplier			
Remark			
Development Sample Report			
Enter recycle information or applications to add material data sheets to component or semi-component data sheet,			
Does it contain recycle material?	△	Containing recyclate	Select "Yes" (default value is "No").
Content of post industrial recyclate	△	Containing the recyclate in question	Enter the content of post industrial recycle rate by two range values.
Content of post consumer recyclate:	△	Containing the recyclate in question	Enter the content of post consumer recycle rate by two range values.
Applications	△	Required by the system	Select an applicable application code.

Table-5 Entry Items to Composition Information of Chemical Substances

Symbol for necessity of entry ○:Essential △:Essential on condition Blank: Optional

Field Name	Necessity of Entry	Entry Condition	Remarks for Entry
Confidential			Total contents of confidential substances and Wild Cards in a material shall not exceed 10%.
Portion	○		Enter a range value or fixed value, or specify it as the remnant.

Table-6 Entry Items to Composition Information in Semi-component Data Sheets

Symbol for necessity of entry ○:Essential △:Essential on condition Blank: Optional

Field Name	Necessity of Entry	Entry Condition	Remarks for Entry
Description	○		Description used by supplier is acceptable. Top Node = a level below Isuzu supply level
Part/Item No.	○		Description used by supplier is acceptable. Top Node = a level below Isuzu supply level
Development Sample Report			
Specific Weight	○		Enter specific weight of volume, area, or length

3.4 Creation of a Component Data Sheet

Please enter necessary items to the composition information in a component data sheet according to Table-7. When you create a component data sheet that includes component data sheets for sub-parts and sub-sub-parts, the composition of such parts shall be clearly defined using, for example, a tress structure. (This is for correct decision on the appropriateness of materials and applications) .

3.4.1 Quantity of sub-parts

When you add a component data sheet for sub-parts that constitute a component data sheet, please correctly enter the quantity of sub-parts in the quantity field of the detailed tab for the composition information of sub-parts.

3.4.2 Parts marking information for a component data sheet containing resin and rubber

Please enter your answers to the parts marking questions to the composition information of a component data sheet when you add material data containing resin and rubber to the component data sheet. (Please see Table 7 for entry conditions)

Table-7 Entry Items to Composition Information in Component Data Sheets

Symbol for necessity of entry ○:Essential △:Essential on condition Blank: Optional

Field Name	Necessity of Entry	Entry Condition	Remarks for Entry
Description	○		Description used by supplier is acceptable. *See Note
Part/Item No.	○		Description used by supplier is acceptable. *See Note
Measured Weight per Item	○		Measured value (designed value also acceptable)
Tolerance	○ *	Against component data sheets for delivery to Isuzu (Top Node)	5% (fixed value), or design tolerance and control limits, etc. *Data entry to component data sheets below top node is arbitrary, except when requested by Isuzu.
Development Sample Report			
When added to a component data sheet, entry of quantity of components as sub-parts is required.			
Quantity	○		
When a material data sheet containing resin and rubber is added, entry of material marking information is required.			
Polymeric parts marked	△	Resin: 100g or more Rubber: 200g or more or as instructed in the drawing	

*Notes Writing Part/Item No. and Description: Be sure to enter part/item number and description specified by Isuzu to the company data in the data sheet. The data sheet may be rejected("recd") when its entries are not correct.

Part/item numbers and part names, when they are specified in Isuzu drawings, shall be correctly used for component data sheets of sub- and sub-sub parts.

4. Correction of a Data Sheet

4.1 Sending Corrected Data Sheets

If a data sheet is rejected, Isuzu will inform the supplier of the reason of the rejection by e-mail. The supplier is requested to immediately confirm the reason and correct it to send a modified data sheet to Isuzu.

* With respect to module modification, the module ID of a data sheet shall remain unchanged. Version update must be made with the same module ID. (Please see 2.3.1)

4.2 Acceptance Completion Time Limit for Corrected Data Sheets

When a data sheet is rejected, a modified data sheet shall be sent to Isuzu as soon as possible for acceptance.

5. Sending of a Data Sheet

5.1 Recipient of a Data Sheet

When you send a data sheet to Isuzu, please specify the IMDS Company ID of the recipient company (Isuzu) as 22349.

5.2 Entry to the Company Data

5.2.1 Entry for a Material Data Sheet

Refer to Table 8 to send a material data sheet to Isuzu.

5.2.2 Entry for a Semi-component Data Sheet

Refer to Table 9 to send a semi-component data sheet to Isuzu.

5.2.3 Entry for a Component Data Sheet

Refer to Table 10 to send a component data sheet to Isuzu.

Table 8 Entry to Company Data for Material Data Sheets (See Fig. 2)

Field Name	Necessity of Entry	Entry Conditions	Remarks for Entry
Internal Mat.-No.	○		Enter part/item number specified by Isuzu
Name	○		Enter name specified by Isuzu
Supplier Code	○		Enter supplier code specified by Isuzu
Forwarding allowed	○		Select "Yes"

Table 9 Entry to Company Data for Semi-component Data Sheets (See Fig. 3)

Field Name	Necessity of Entry	Entry Conditions	Remarks for Entry
Item- /Mat.-No.	○		Enter material code specified by Isuzu
Description	○		Enter description specified by Isuzu
Supplier Code	○		Enter supplier code specified by Isuzu
Forwarding allowed	○		Select "Yes"

Table 10 Entry to Company Data for Component Data Sheets (See Fig. 4)

Field Name	Necessity of Entry	Entry Conditions	Remarks for Entry
Part/Item No.	○		Enter part/item number specified by Isuzu
Description	○		Enter description specified by Isuzu
Supplier Code	○		Enter supplier code specified by Isuzu
Forwarding allowed	○		Select "Yes"

Fig.-2 Entry to Company Data
(For Material Data Sheet)

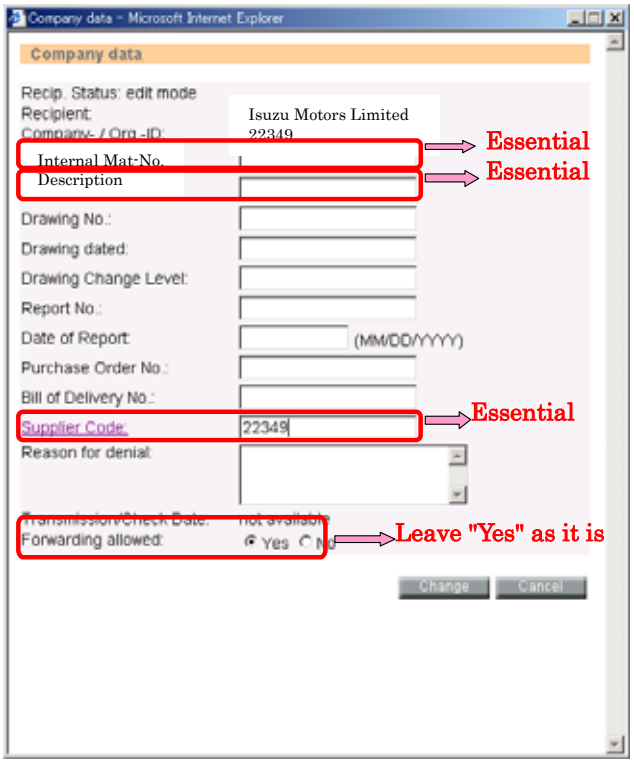


Fig.-3 Entry to Company Data
(For Semi-component Data Sheet)

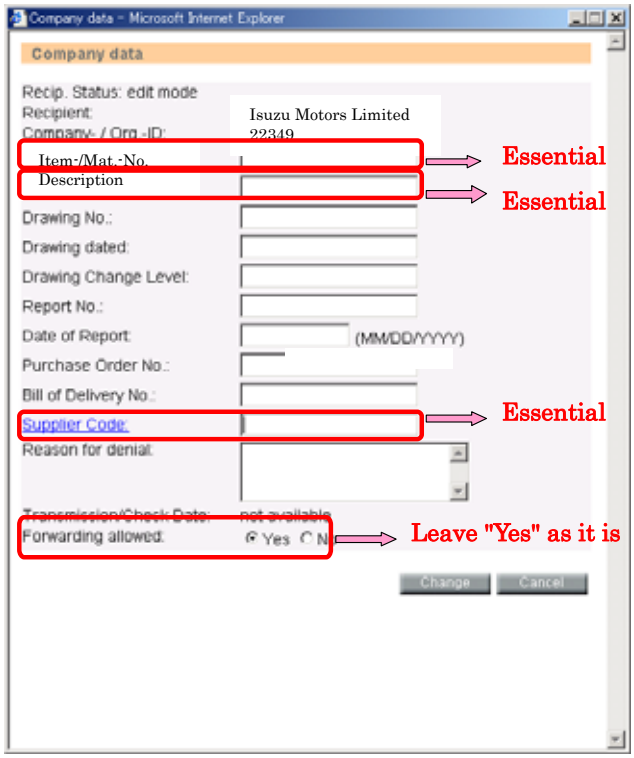
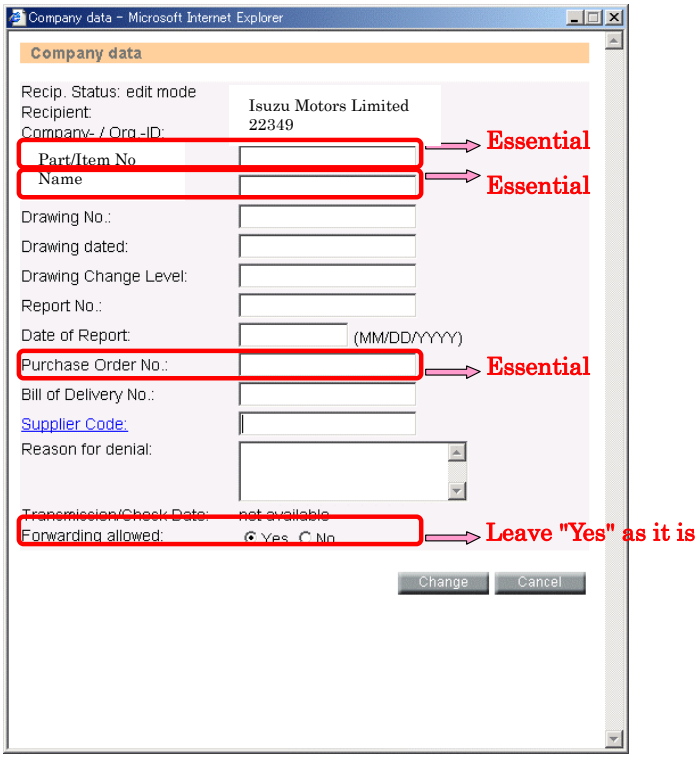


Fig.-4 Entry to Company Data
(For Component Data Sheet)



6. Contacts for Inquiries about IMDS

6.1 Operation Procedures for Logon and Data Creation/Correction/Sending with the IMDS System

Information on IMDS system in general			
Public IMDS Pages	www.mdsystem.com		
Various materials of IMDS system			
Material names	URL		
IMDS Training Guide (Japanese)	http://www.mdsystem.com/magnoliaPublic/ja/public/faq/GenInfo/TrainingMaterial.html		
IMDS Handbook (Japanese)			
IMDS User Manual (English)	Same as above		
IMDS Service Centers in the world			
Area	Telephone number	Office hours	E-mail address
Japan	+81-3-5349-7010	9:00am - 5:00pm (GMT+9) (Except Saturdays, Sundays and Holidays)	jpimds-helpdesk@hp.com
Korea	+82-2-2199-0203,-0204	9:00am - 5:00pm (GMT+9) (Except Saturdays, Sundays and Holidays)	imdsk-helpdesk@hp.com
China	+86-27-87431668	9:30am - 12:30pm, 1:30pm - 5:00pm (GMT+8) (Except Saturdays, Sundays and Holidays)	IMDS-EDS-Helpdesk-China@hp.com
Europe	+36-1-298-1536	8:00am - 4:30pm (GMT+1) (Except Saturdays, Sundays)	imds-helpdesk-emea@hp.com
France	+33-1-55-69-7860	Same as Europe	Same as Europe
America	+1-972-403-3607	8:00am - 5:00pm (CST) (Except Saturdays, Sundays)	imds-helpdesk-americas@hp.com

6.2 Isuzu Motors Ltd.

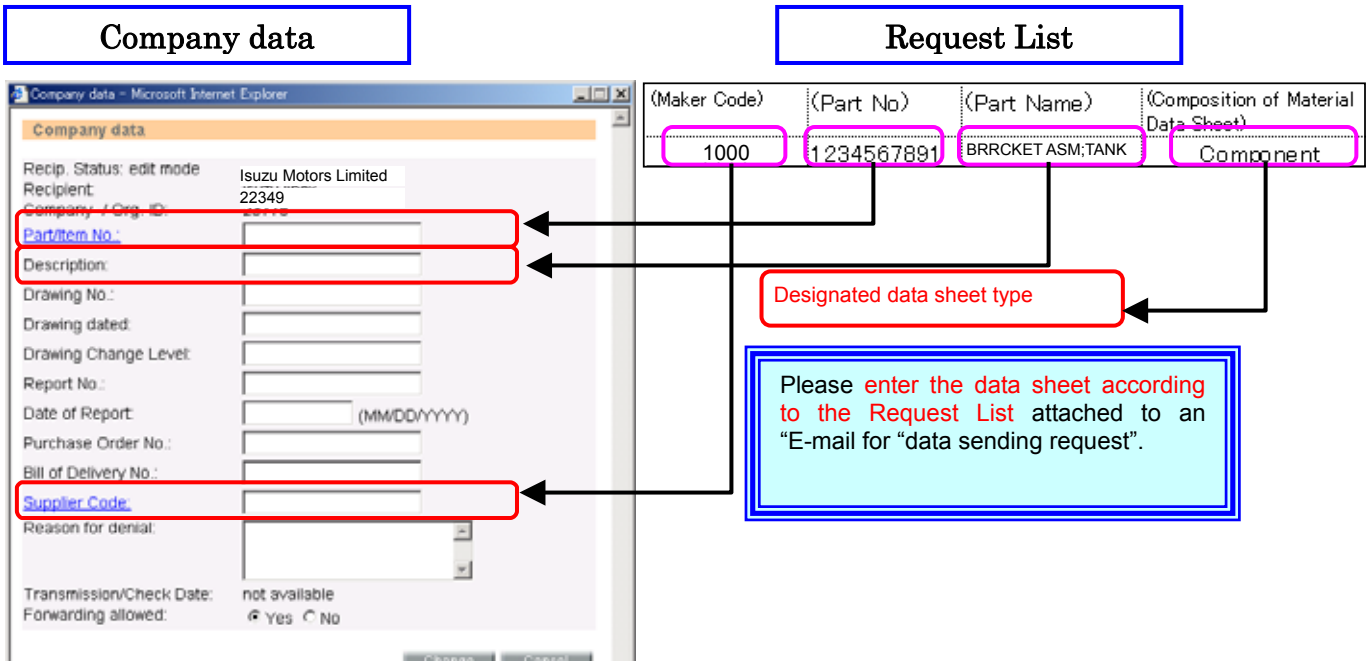
Content of inquiry	Person in charge	Telephone number	Facsimile	E-mail address
Content of request for data transmission Delivery parts Parts supplied by Isuzu Person in charge of IMDS at supplier Items concerning changes, etc.	Norikazu Kawai Purchasing Operations Dept.	0466-45-9397	0466-45-9493	Norikazu_kawai@notes.isuzu.co.jp
Items concerning this operation manual in general	Hideo Ishiyama Compliance & Certification Dept.	0466-45-2078	0466-45-2499	imds-info@notes.isuzu.co.jp
Entry method for metal materials	Yuichiro Hara Vehicle Research & Experiment Dept.	0466-45-2045	0466-45-6954	
Entry method for materials other than metal materials	Soichi Takahashi Vehicle Research & Experiment Dept.	0466-45-2682	0466-45-2676	

7. Key Points of the Creation of IMDS Data Sheets

7.1. "Supplier Code", "Part Number.", "Description", and "Data Sheet Type"

Entry Method

When an entry method is specified by Isuzu through a request list, etc., please create a data sheet according to a data sheet type designated by Isuzu, and make sure that necessary information is entered to each item of the "Company Data" according to the specification from Isuzu before you send the data sheet to Isuzu.



Note

"Supplier/Maker Code"

For a request made by Isuzu Motors Limited, please use the Isuzu supplier code specified by **a 4-digit serial number**.

However, a request made by Isuzu Motors America, Inc., Isuzu Motors Co., (Thailand) Ltd., etc. will have 4 alphanumeric characters.

Note

"Part/Item Number."

A "Part/Item Number" is specified by **a 10-digit serial number.** (Please don't use space, hyphen, slash, dash, etc.)

Note

"Description"

As for a part requested as one of the complete characteristics data of the drawing based on the drawing direction of ISC-A00-008Y or a part not included in the request by Isuzu, enter a part name described in the drawing. Furthermore, be sure to enter the correct installation position of the relevant part (RH/LH, FT/RR, etc.).

Note

Data Sheet Type

If not specified, select one of the three data sheet types shown in the table below according to the type of delivery to Isuzu.

Refer to Section 4.2 for component data sheets, Section 4.3 for semi-component data sheets, and Section 4.4 for material data sheets in the IMDS Recommendation 001.

Type of delivery to Isuzu	Data sheet type
Complete assembly, Component	Component
Casting/Forging blanks, Semi-finished product	Semi-Component
Material, Quasi-direct material	Material

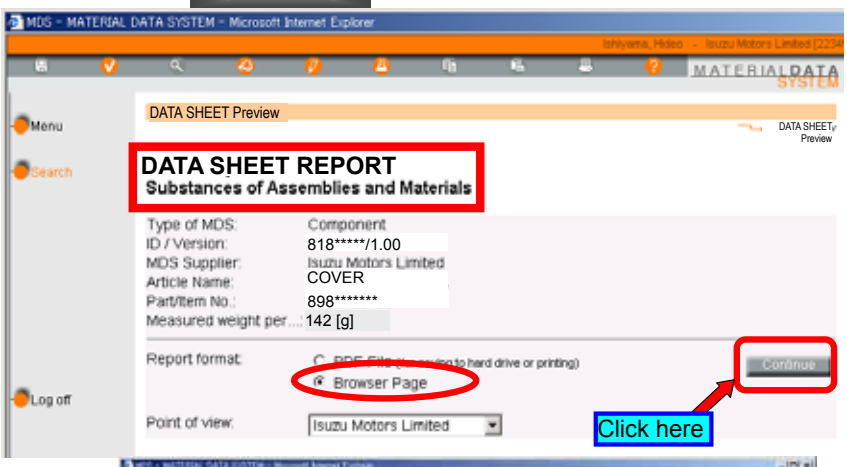
7-2. Recycle Information and Parts Marking Information

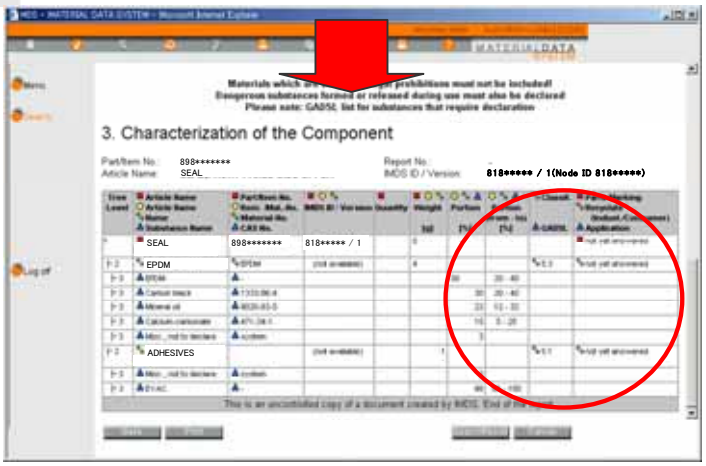
Note There are new information items to be entered after the creation of a relevant data sheet. Follow the entry method below when using the data sheets created in the past to create a new data sheet. Pay due attention to any omissions of the necessary items of information.

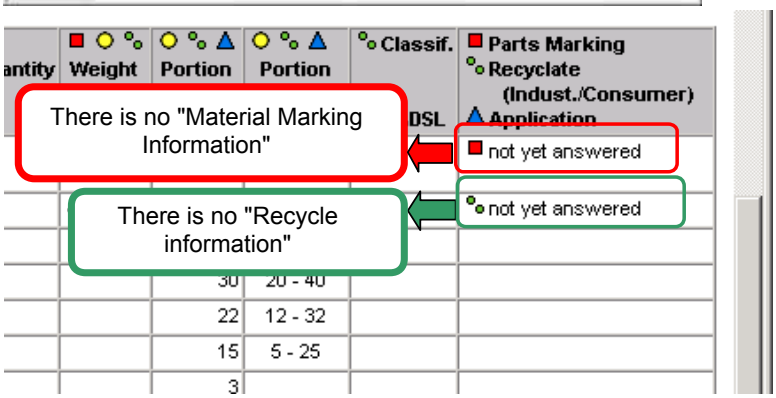
Note Parts Marking Information:

- Parts marking information is necessary for all component data sheets which are placed immediately above the material data sheets that contain rubber and plastic materials. (It is also necessary for sub-parts)

Confirmation Method To confirm the existence of recycle information and material marking information, search the data, and click the Continue button. Select "Browser Page" for report format. Then click the Preview button to display a data sheet report for confirmation.







7-3. Other Chemical Substances (Wild Card)

IMDS Recommendation 001 4.5.

Note "Wild Card": Total contents of Wild Card such as Misc, Pigment portion, etc. should be limited to 10% or less for each material. However, if a material data sheet consists of several material data sheets, they will be excluded form this limit. (See IMDS Recommendation, 5.1.A)

Note Confidential Substances: Total content of chemical substances included should be limited to 10% or less for each material.

Note Wild Card＋Confidential Substances: Total content of chemical substances included should be limited to 10% or less for each material .

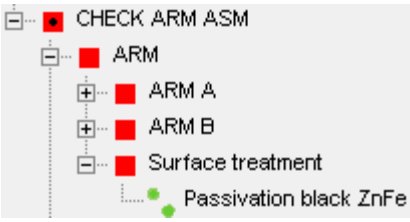
Note On condition that the above limitation is observed, please disclose 90% or more of the specific chemical substances for each material.

7-4. Data Tree Structure

Note Unify the types of data sheets at the same level of the data tree.

IMDS Recommendation 001 4.1

Good Example



Structure is okay

Bad Example

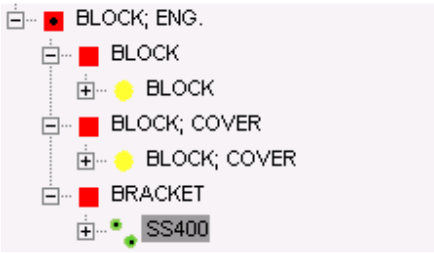
Structure is wrong

Note Use semi-component data sheets for semi-finished products only.

IMDS Recommendation 001 4.3.1

Note When you use a semi-component data sheet for sub-parts whose weights are clearly defined, create a component data sheet for the sub-parts, and place a semi-component data sheet below the component data sheet.

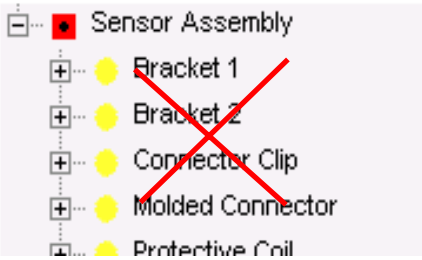
Good Example



Structure is okay

Semi-component data sheets are placed below a component data sheet for sub-parts.

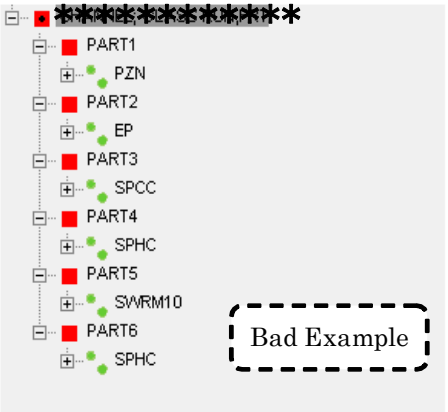
Bad Example

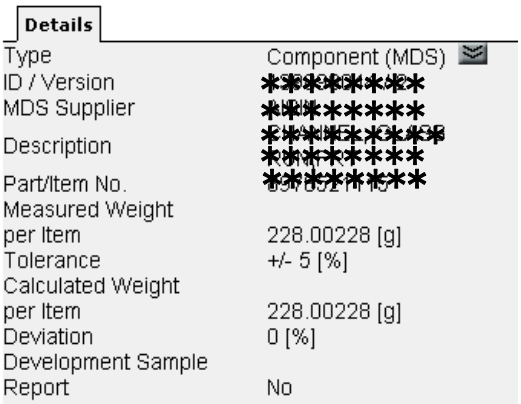


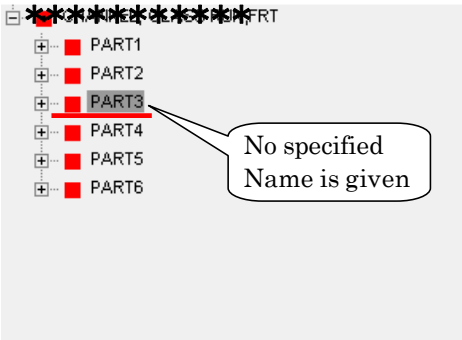
Structure is wrong

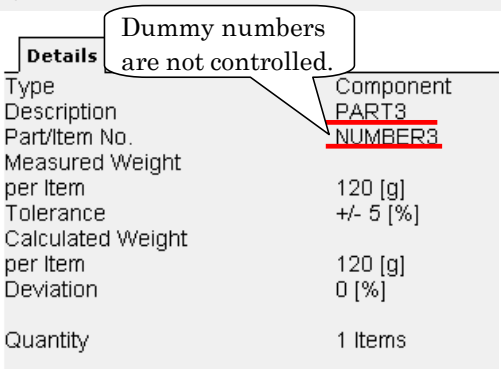
Plural Semi-component data sheets are directly attached to a component data sheet whose weight can be defined.

Note Do not enter dummy names and numbers to the part numbers and descriptions of sub-components. Improper names and numbers cannot tell if a tree structure or a material data sheet is correct (*).









(*) Cases that defy proper decisions

1) If a resin material is listed in a material data, we cannot decide whether the resin material is resin as a part or resin as paint.
2) If lead is listed as a chemical substance in a material data, we cannot decide whether its listed “Application” is proper or not.

7-5. Data of Coatings/Adhesives

IMDS Recommendation 001 4.4.1 & Rule 4.4.1.B

Note List only chemical substances that are included in coating and adhesive layers of the finished products at the time of shipment.
Do not list process chemicals that will not remain in the finished products.
Examples * Primers and inks must be listed in their hardened and dried conditions.
* Chemical substances must be listed after their chemical reactions are finished.

Note MSDS: Do not copy data sheets for chemical substance safety.

Note Pay attention to the listing of process chemicals when you create a chemical substance data sheet.

Bad Example

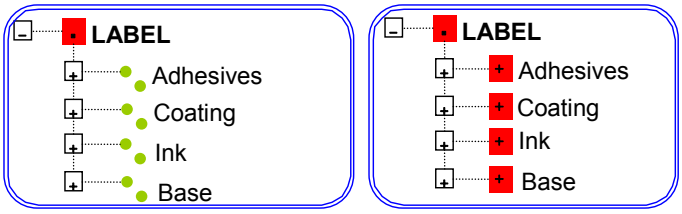
4	PRIMER	
5	Triiron tetraoxide	1317-61-9
5	Polyolefin Resin	-
5	Xylene	1330-20-7
5	Toluene	108-88-3
5	n-Butyl acetate	123-86-4
5	Solvent naphtha (petroleum), heavy arom.	64742-94-5
5	Butanone	78-93-3
5	Further Additives, not to declare	system

Process chemicals that will not stay in the finished products are erroneously listed.

7-6. Data for Labels

Note Materials that are shown in a label such as base metal, ink, adhesives, surface coating materials shall be separately listed in a component data sheet and material data sheet with proper names.

Sample of structure for LABEL



7-7. Names of Material Data

IMDS Recommendation 001 4.4.1 & Rule 4.4.2. A to D

Note Names must specify the materials used. Use names specified in ISO.

Note Do not use part names or commercial names.

7-8. Cautions in Selecting Material for IMDS

Note

Cautions in Selecting Plastic Material for IMDS:
For thermosetting urethane, select 5.4.1 'Polyurethane'. For thermoplastic urethane, select either 5.1.a 'Filled thermoplastics' or 5.1.b 'Unfilled thermoplastics'.

Note

Cautions in Selecting Paint Material for IMDS:
For paint material, select 6.1 'Lacquer' only, even if a coating on a part is made up of urethane, epoxy, acrylic, and/or any other paint(s).

8. FAQ (Frequently Asked Questions)

Q1. The person in charge of our IMDS service or the relevant part that is registered at Isuzu was changed. Please let us know how to change such data.

A1. If the person in charge of the IMDS data, the relevant part, or your e-mail address was changed, please notify Isuzu of the change by e-mail, etc. Isuzu will send you a form for the entry update. Please fill out this form and return it to Isuzu.

Q2. We do not know how to operate IMDS system.

A2. For a question about how to operate the IMDS system, please contact the IMDS Service Center. For a concrete description of each operating procedure, see the IMDS User Manual. (Refer to Section 7.1 of this manual.)

Q3. Questions about troubles with IMDS system such as "password has been locked"

A3. For any trouble with IMDS system, refer to the IMDS User Manual describing ways of dealing with troubles, or contact the IMDS Service Center. (Refer to Section 7.1 of this manual.)

Q4. We sent a data sheet to Isuzu, but it was rejected. How can we know why it was rejected?

A4. Isuzu will send an e-mail notifying of the (check) result to suppliers. Please confirm the specific reason and the correction procedure. (Refer to Section 1 and Section 4.1 of this manual.)

Q5. We have sent a modified data sheet. Please let us know if the data sheet that had errors can be left as it is?

A5. After you finish sending a corrected data sheet, delete the data sheet that had errors within the day. Also, please check if the status of the deleted data sheet has been turned to "cbs" (cancelled by the sender).

Q6. We corrected a part number in a data sheet and sent it to Isuzu, but it was rejected as it had a wrong part number. Please let us know how to correct it.

A6. Please correct the part number in the company data for recipient information. (Refer to Section 5.2.1 of this manual.)

Note: Because of the IMDS system, Part / Item Numbers of the top node component data sheets sent are replaced with Part/Item Numbers written on the corporate data on the receiving side. (This situation is occurred in "Internal Mat.-No.", "Name", "Item-/Material-No." and "Article Name" of material data and semi-component data sheets.)